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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,040	09/04/2003	Stephen V. Deckers	10016172-3	8460

7590 11/23/2004

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Intellectual Property Administration
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EXAMINER

TRAN, KHOI H

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/656,040

Applicant(s)

DECKERS, STEPHEN V.

Examiner

Khoi H Tran

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28, 37, 38 and 44-59 is/are pending in the application.
- 4a) Of the above claim(s) 47-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28, 37, 38 and 44-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


KHOI H. TRAN
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Newly submitted claims 47-59 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The original elected claims are directed to an automated data storage apparatus, wherein all of the data storage comprises a tape cartridge form factor and including a hard disk drive data storage.

Claim 47 is directed to a non-elected embodiment of Figure 3;

Claims 48 and 49 are directed to the non-elected method claims;

Claims 50, 52-58 are directed to a non-automated or manual cartridge handling system, wherein the disk cartridge is a non-hard-disk drive.

Claims 51 and 59 are directed to a non-hard-disk drive with a non-tape cartridge form factor.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 47-59 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

2. Figure 4 is objected to under 37 CFR 1.83(a) because it fails to show how the integrated docking device 330 can actually accept both tape and HDD media without encountering any interference by element 122. Figure 4 also fails to show, in structural detail, how the docking device 330 can actually accept and read both tape and HDD

media. Elements 122 and 231 do not provide sufficient structure for one of ordinary skill in the art to ascertain the physical make up of the integrated docking device. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 45 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The original specification did not describe in detail how a single docking device 330 (Figure 4) can link either a tape cartridge or a hard disk drive to the host device. The specific of how the tape read/write device 231 and the docking interface 122 are designed to co-locate on a single docking device to serve the claimed functions is not known. The mere statement that the tape read/write device can be combine with the docking interface on one docking device does not provide sufficient enablement for the claimed invention. Based on the original written description, one of ordinary skill in the art would not be able to make and/or use the claimed invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 28, 37, 38, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulakowski et al. 6,731,455 in view of Stefansky 5,329,412.

Kulakowski '455 discloses a data storage library per claimed invention. The library comprises a plurality of storage areas for housing plurality of hard disk drive device (HDD, see Figures 1A and 4). The library comprises robotic grippers 62 for

gripping and moving said HDD 's (Figures 2 and 3) from/to said storage areas. The library comprises a host device 72 (Figure 2) for controlling the library operations. The library comprises plurality of interfaces for communicatively linking the HDD 's to the host device (Figures 2, 3, and 4). Kulakowski '455 data storage library is also capable of handling tape cartridges or a combination of tape and hard disk drive devices (column 11, lines 21-47). However, Kulakowski '455 is silent as to the specific of the HDD having form factor in the shape of a tape cartridge.

Stefansky '412 discloses a portable hard disk drive device. Stefansky '412 teaches that the hard disk drive device housing can have the dimension of a tape cartridge (column 1, lines 55-61).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the housing dimension of Kulakowski '455 HDD coincides with the housing dimension of a magnetic tape cartridge, as taught by Stefansky '412, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F .2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, it would have been obvious for one of ordinary skill in the art to have provided Kulakowski '455 HDD with a housing having the same dimension of a magnetic tape housing because such HDD cover had been known in the art, as demonstrated by Stefansky '412.

Since Stefansky '412 modified apparatus and docking device is designed to handle storage media having tape cartridge form factor, it is obvious that the apparatus and the docking device is also capable of handling any tape cartridges.

In regards to claim 37, Kulakowski '455 discloses all elements per claimed invention as explained above. However it is silent as to the specifics of the HDD having form factor in the shape of a Digital Linear Tape (DLT).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the housing dimension of Kulakowski '455 HDD coincides with the housing dimension of a Digital Linear tape cartridge since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F .2d 272, 205 USPQ 215 (CCPA 1980).

7. Claims 45 and 46, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kulakowski et al. 6,731,455 in view of Stefansky 5,329,412 as applied to claim 28 above, and further in view of Kim 5,666,342.

Stefansky '412 modified apparatus discloses all elements per claimed invention including the capability of handling any type of storage media that have the same tape form factor housing. However, Stefansky '412 is silent as to the specifics of communicatively linking or reading the tape and HDD storage media to the host device by a single docking interface.

Kim '342 teaches that the integration of different type of docking interfaces provides convenience of use (column 1, lines 32-35). Kim '342 shows that it is possible to integrate a tape-docking interface with a disc-docking interface to form a single docking module.

It would have been obvious for a person with ordinary skill in the art, at the time the invention was made, to have provided to Stefansky '412 docking device with an

integrated feature that would allow said docking device to read both tape and HDD media because it provides convenience of use for the apparatus, as taught by Kim '342.

Response to Arguments

8. Applicant's arguments with respect to claims 28, 37, 38, and 44-46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Additional references made of record and not relied upon are considered to be of interest to applicant's disclosure: see attached USPTO Form 892.

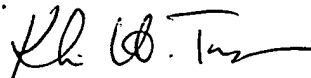
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khoi H Tran whose telephone number is (703) 308-1113. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (703) 308-1113. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Khoi H Tran
Primary Examiner
Art Unit 3651

KHT
11/18/2004